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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/808,818      | 03/15/2001  | Ryuichi Murai        | NAK1-BO22           | 5636             |

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08/26/2003

EXAMINER

MACCHIAROLO, PETER J

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2875

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/808,818

Applicant(s)

MURAI ET AL.

Examiner

Peter J Macchiarolo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 18-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-44 and 46-52 is/are allowed.
- 6) ☒ Claim(s) 18, 29, 45 and 53 is/are rejected.
- 7) ☒ Claim(s) 19-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 27 June 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. The reply filed on June 27, 2003 consists of changes to the specification, the drawings, and to the claims, and further, the reply consists of remarks related to the prior rejection of claims in the First Office Action. The above have been entered and considered. However, claims 18, 29, 45, and 53 are not allowable as explained below.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 45 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

3. The Examiner recognized that the original specification and drawings discloses the long side extensions being substantially triangular in shape. However, the original specification, drawings, or claims fail to mention the extensions on the *short sides* are substantially triangular.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 18, 27, and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by De Wit et al (USPN 5,434,470; “DeWit”).

5. In regards to claims 18 and 27, DeWit discloses in figures 1 and 8, a face plate (1) having a phosphor screen (not labeled) on an inner main surface, an electron gun (4) operable to emit an electron beam (5,6,7) toward the phosphor screen, a frame (15) that holds a mask (10) at a place between the electron gun, an internal magnetic shield (16) that is a pyramid having two openings respectively at an apex and a bottom of the pyramid, has two opposite long sides (33, 34) and two opposite short sides (32, 31), and is deposited to surround a path of the electron beam with the apex of the pyramid being on a side of the electron gun, wherein an end of the internal magnetic shield being the bottom of the pyramid is attached, inside the cathode ray tube, to the frame. DeWit further shows in figure 8 that the corners are cut<sup>1</sup> and extend the opening on the side of the electron gun. DeWit further discloses the frame holds the mask by applying a tension to the mask<sup>2</sup>.

6. In regards to claim 53, DeWit discloses in figures 1 and 8, a cathode ray tube having at least one source of an electron beam wherein the magnetic shield (16) is in the shape of a hollow

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<sup>1</sup> DeWit, col. 2, ll. 44-49.

<sup>2</sup> DeWit, col. 3, ll. 32-34.

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rectangular frustum, the first and third sides (33, 34) form two opposite long sides, the second and fourth sides (32, 31) form two opposite short sides, the interface between each adjacent long side and short side forming corner joints that are continuous from the substantially wider base to the substantially narrower top of the hollow rectangular frustum, the magnetic shield being disposed to surround the path of the electron beam (5,6,7) with the top of the hollow rectangular frustum positioned near the source of the electron beam with the top of the hollow rectangular frustum positioned near the source of the electron beam, the electron beam defining an axis from the top to the base of the rectangular frustum.

7. The Examiner notes that the limitation at lines 12-13 of newly added claim 53, “the effective magnetic permeability of each long side is higher than the effective magnetic permeability of each short side” is an inherent property of DeWit’s shield.

#### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Allowable Subject Matter***

9. Claims 19-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 30-44, and 46-52 are allowed.

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11. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to motivate or disclose Applicant's improvement for a magnetic shield, specifically, an extension being centered along the top edge of each long side and formed in a planar continuation of each long side in the direction of the top of the hollow rectangular frustum, and each long side extension having lateral edges separated from the nearest corner joint along the top edge of each long side.

### *Conclusion*

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

13. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (703) 305-7198.


The examiner can normally be reached on 7:30 - 4:30, M-F.

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15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

16. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

pjm  
August 19, 2003



**THOMAS M. SEEWER**  
**PRIMARY EXAMINER**